

S.N. 10/087,584

AMENDMENT TO THE SPECIFICATION

[0032] Fig. 2B shows the second phase of the first embodiment of the present invention. In this phase the stored information is retrieved including the background noise removal tonemap and the image data (that may or may not be pre-processed). The retrieved data is provided to the background noise removal module 25 which includes a pixel conversion module 25A. The pixel conversion module 25A converts the image data pixel values using either the background noise removal tonemap or an idle tonemap dependent on user selection module [24] 28. The idle tonemap corresponds to an identity function such that the pixels values remain the same. The background noise removal tonemap function maps pixel values identified as background to a selected pixel value effectively removing any unwanted background noise. In the case in which the background noise removal LUT is stored by data storage module [28] 24, then pixel conversion 25A is performed by indexing into the noise removal LUT with each of the image data pixel values to obtain new pixel values.